Exploration Operations Mining Management Plan and Public Report

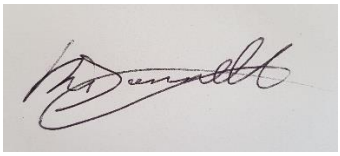
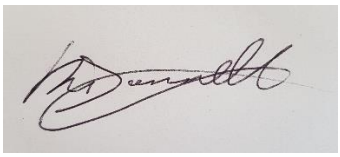
KURUNDI PROJECT

NORTHERN TERRITORY

AUTHORISATION 0879-01

2016-17 REPORT

22 JULY 2017

	Author	Reviewed by	Approved by
Date 16 June 2016	Wendy Jettner Complete Tenement Management Services	Kevin Dunnell	Kevin Dunnell
Name: Kevin Dunnell			
Signature 			
Date 22 July 2017	Alison Skeldon	Kevin Dunnell	Kevin Dunnell
Name: Kevin Dunnell			
Signature 			
Date 14 November 2017	Alison Skeldon	Kevin Dunnell	Kevin Dunnell
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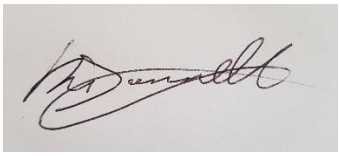
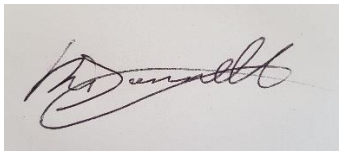
Signature 			

I Kevin Dunnell, nominated joint title holder **declare that to the best of my knowledge the information contained in this mining management plan is true and correct and commit to undertake the works detailed in this plan in accordance with all the relevant Local, Northern Territory and Commonwealth Government legislation.**

SIGNATURE:



DATE 22 JULY 2017

Table of Contents

Amendments

As per Section 41(3) of the *Mining Management Act*, an MMP reviewed and amended under Section 41(1)(a) is to clearly identify amendments made. These changes must be outlined in a table, including relevant page numbers, as per the example below.

Section	Amendment
2016 MMP	**Format and order of sections updated to DPIR MMP and Public Report Structure template dated 31 January 2017, Version 2.0 and replacement of DME with DPIR where necessary**
1 - Operator Details	Operator name to reflect group title holders (p.5)
1.1 - Organisational Structure / Chart	Change in organisational structure (p.5)
1.2 - Workforce	Amended to reflect organizational chart (p.5)
2.0 - Identified Stakeholders and Consultation	Tense changes (pp.6&7)
3.1 - Previous Activities and Current Status	Added exploration activity in reporting period (p.15)
3.2 – Proposed Activities	Updated Time of Year (p.16)
4.0 – Current Project Site Conditions	Flora and Fauna descriptions updated with survey results (p.17)
5.4 – Identification of Environmental Aspects and Impacts	Surface Water Drainage Interference p.23 Fauna Disturbance (p.26)
5.6.2 – Performance Reporting	Updated to include Flora and Fauna Survey and report (p.37)

NOTE: If the MMP does not clearly identify the amendments made as per the above table, the MMP will be declared “Deficient” and returned to the operator without any further review.

1 Operator Details

Operator Name: Mr Kevin Dunnell for the Kurundi Group of title holders

Key Contact Person/s: Mr Kevin Dunnell

PO Box 797 Drouin VIC 3818

Street Address: 18 Mahogany Crt Drouin VIC 3818

Phone: 0419 198 869

Email: goldmeteor@bigpond.com

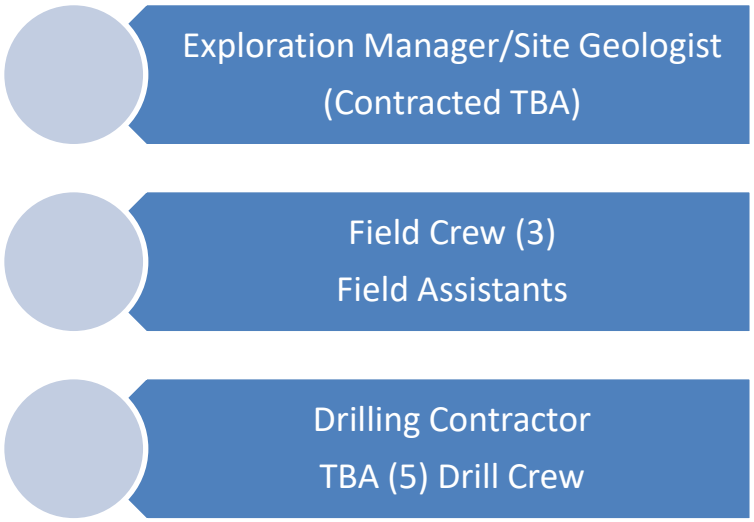
The completed nomination of Operator of a Mining Site (DME Form AF7-008) is included as APPENDIX 2.

1.1 Organisational Structure

The Kurundi Group is the name given to the group of tenement holders to alleviate the need the name all the individuals throughout this document. The Kurundi Group comprises:

Mr K Dunnell, Mr T Hall, Mrs MA Hall, Mr A Hoppe and Mr A Falzon.

Kurundi Group Site Management Structure



1.2 Workforce

The workforce will consist of 1 exploration manager who is also the site geologist, a geological field crew of three and a contract drilling crew of 5 people which will undertake daily onground exploration operations.

2 Identified Stakeholders and Consultation

The proposed activities will occur on PPL1109, (NTP 00716). As mentioned in section 5.2 the pastoral lease is owned by Peter and Brenda Saint. The landholder ILIS search is included as APPENDIX 8.

The landholder has been provided with a copy of this Mining Management Plan prior to its lodgement with the Department and preliminary discussions have been held via telephone. It is understood that the landowner wishes to make comments regarding the proposed Authorised Activities, however these have not been received to date. It is our intention to continue these communications, but at this time ask that the Department begin the assessment process of the Mining Management Plan in anticipation of either satisfactory negotiations or commencement of Arbitration.

The comments have been received from the leaseholder and the matter has been applied for Arbitration by the NTDPIR on 07/04/2016.

The matter of access was referred to the Land Access Assessment Panel which met on 22/4/2016 and has upheld the right of access to Kurundi Station for mineral exploration purposes and imposed further conditions for this access, these were included in the document DME Reference No MR2016/0132 which this document addresses.

No less than 14 days prior to undertaking the Authorised Activities we will inform the landholder of our intention to enter the work area.

Other stakeholders include but are not limited to:

Central Land Council

Traditional Owners

NT Department of Primary Industry and Resources

NT Worksafe

NT Department of Land Resource Management

Additional Stakeholders to be consulted as instructed By DPIR Compliance officers:

Lease Owner (see above)

Land Owner (see above)

Land/pastoral manager (see above)

Land Claimants (Native Title)

Land Council representing the traditional owners for the country (see above)

Neighbours and communities

Government Departments (see above)

Shareholders

Details of consultations are outlined below:

Lease Owner

The proposed exploration activities will occur on PPL1109, (NTP 00716). As mentioned in section 5.2, the pastoral lease is owned by Peter and Brenda Saint. The landholder ILIS search is included as APPENDIX 8. Current access negotiations with the lease/land owner have not produced an outcome and the matter was referred to the NTDPIR as a matter for arbitration on 7/4/2016. The matter of access was referred to the Land Access Assessment Panel which met on 22/4/2016 and upheld the right of access to Kurundi Station for mineral exploration purposes and imposed further conditions for this access, these are included in the document DME Reference No MR2016/0137 are addressed in this document.

Land Owner

As the land is pastoral leasehold there is no land owner (a term applied to owners of land titled “Estate in Fee Simple” (freehold) Land).

Land/Pastoral Manager

The pastoral manager for Kurundi station is currently Mr Peter Saint, the son of Mr and Mrs Saint, access negotiations have been referred by him to the lease owners.

Land Claimants (Native Title)

No meetings have been held with the native title claimants, the proposed activities are in accordance with an Exploration Licence granted under the Northern Territory DPIR’s Expedited Native Title procedure and no agreements are required.

Land Council representing traditional owners for the country

As the land is not Aboriginal Freehold land, subject to a land claim, owned by a registered aboriginal land trust or subject to a site of significance listed with the AAPA, the proponents have not conducted negotiations with the Central Land Council.

Neighbours and Community

As the planned small drilling program (9 holes) are well within the Kurundi Station

boundaries the Kurundi Group does not consider it necessary to needlessly inform those members of the wider public community than are not directly affected by its planned activities.

Tenement Manager

The Kurundi group does its own tenement management and as such has been informed of what its planned activities are.

Government Departments

As part of the MMP evaluation process comment may be sought from the NTEPA who are part of their statement of reasons may seek input from the Department of Land Resource Management, Department of Lands, Planning and Environment, Department of Health, Police, Fire and Emergency Services and any other department that it thinks fit. Comments from these departments are usually included in the request for more information as instructed by compliance officers for the NTDPIR and are dealt with as part of the MMP approval process. The Kurundi group agree with this process and consider that all relevant government departments have been adequately consulted by this process.

Shareholders

The shareholders of the Kurundi Group have been informed of the planned activities and this MMP is issued in response to their request.

Ongoing Arrangements and landholder consultation process

Currently there have been negotiations with the leaseholder and pastoral manager which have consisted of several telephone conversations between members of the Kurundi Group and its consultants with the aim of understanding and addressing landholder concerns of exploration activities on Kurundi Station. To this end a copy of the MMP and supporting documentation have been forwarded to the Saints and their comments sought. They have commented on the document and replies to these comments have been provided. Compliance officers already have copies of this correspondence so for brevities sake (these documents run in excess of 20 pages) it has not been included here. The Kurundi Group and the pastoral leaseholder have been unable to achieve an agreement for land access and the matter of access was referred to the Land Access Assessment Panel which met on 22/4/2016 which upheld the right of access to Kurundi Station for mineral exploration purposes and

imposed further conditions for this access, these are included in the document DME Reference No MR2016/0137 which this document addresses.

Evidence of two-way stakeholder communication

As part of the application to the NTDPIR for arbitration, communications between the leaseholders and the Kurundi Group have been made available to departmental officers, as will any further information if required.

Details of future leaseholder communications

Following guidance from the outcomes of the land access arbitration process the Kurundi Group see that positive leaseholder communications are required to fully inform them of the planned activities. As activities progress they will be kept fully informed of drilling activities as they occur on a weekly basis (as the drilling program is expected to take only 2-3 weeks) the onsite time is negligible and they will be kept fully informed on rehabilitation activities and on future monitoring activities including MMP closeout.

In accordance with the DME Instruction MR2016/0137 we address the following:

Road Access: “Where an access road needs to be used by the explorer, the operator seeks the advice of a pastoralist/land manager with regard to the construction and/or upgrade of the existing access road”

The Kurundi Group undertakes to consult with a pastoralist on these matters but brings to the DPIR’s attention that it is likely to transit a drill rig only twice along the existing roads (once in and once out), a rod/support truck a less than 6 times with all other traffic consisting of light vehicles.

Induction: ”All personnel associated with the proposed drilling program need to be made known to the managers of Kurundi Station and staff so that emergency response procedures can be established”.

The Kurundi Group undertakes to hold meetings at a time suitable with both parties with the managers and staff of Kurundi Station so that members of the exploration team may be made known to the managers and staff of Kurundi Station for the purposes of establishing emergency response procedures.

3 Project Details

Authorisation Number: 0879-01

Project Name: Kurundi Project

Location: Kurundi Station, Northern Territory

Site Access:

Southwards via the Stuart Highway from Tennant Creek to Bonney

Well, then eastwards via Kurundi Road to Kurundi Station.

Mining Interest/s: EL 30205

Title holder/s:

EL 30205 – Kevin Dunnell, Thomas Hall, Mary Anne Hall, Andrew

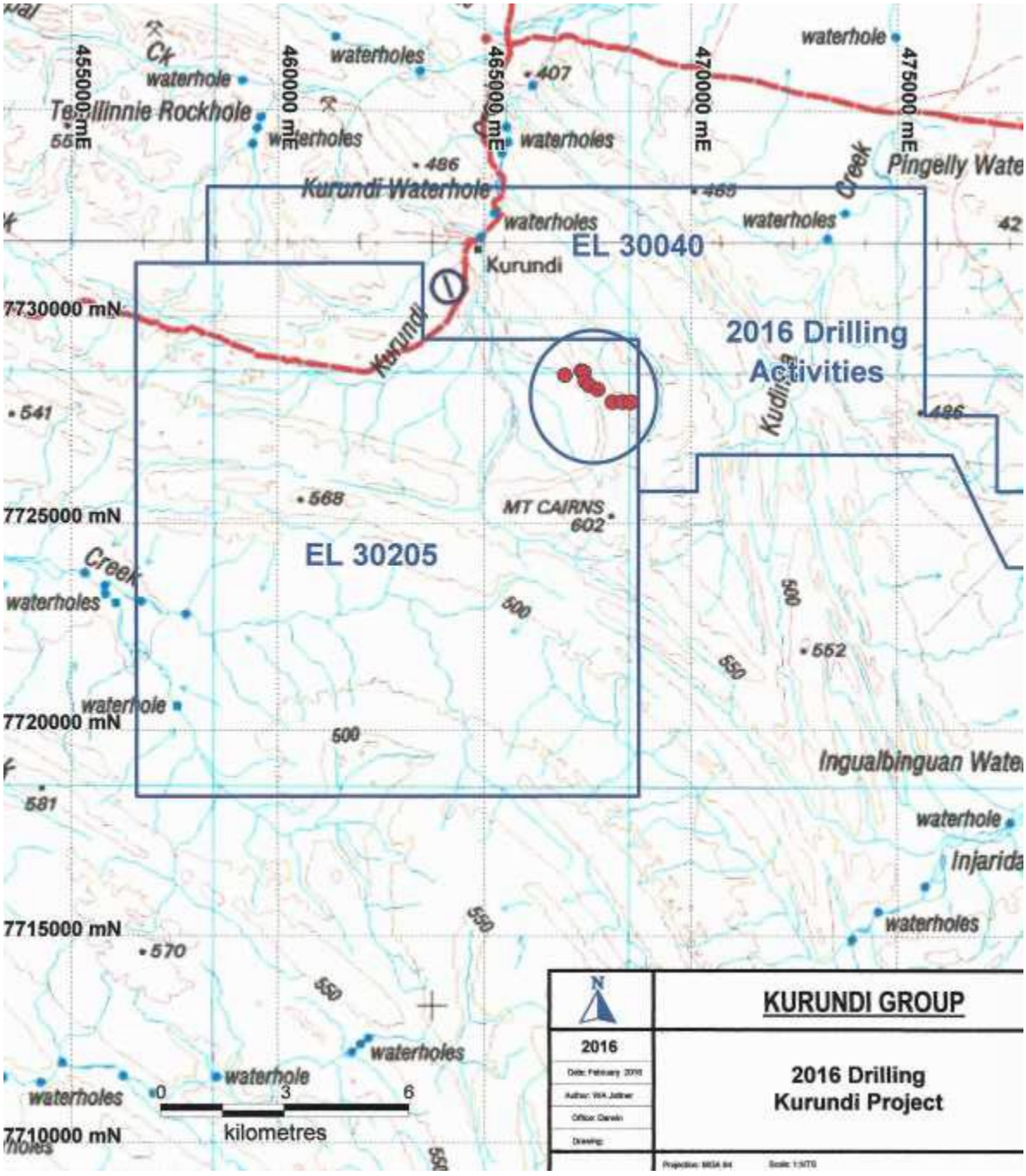
Hoppe, Angelo Falzon

Location maps and site plans:

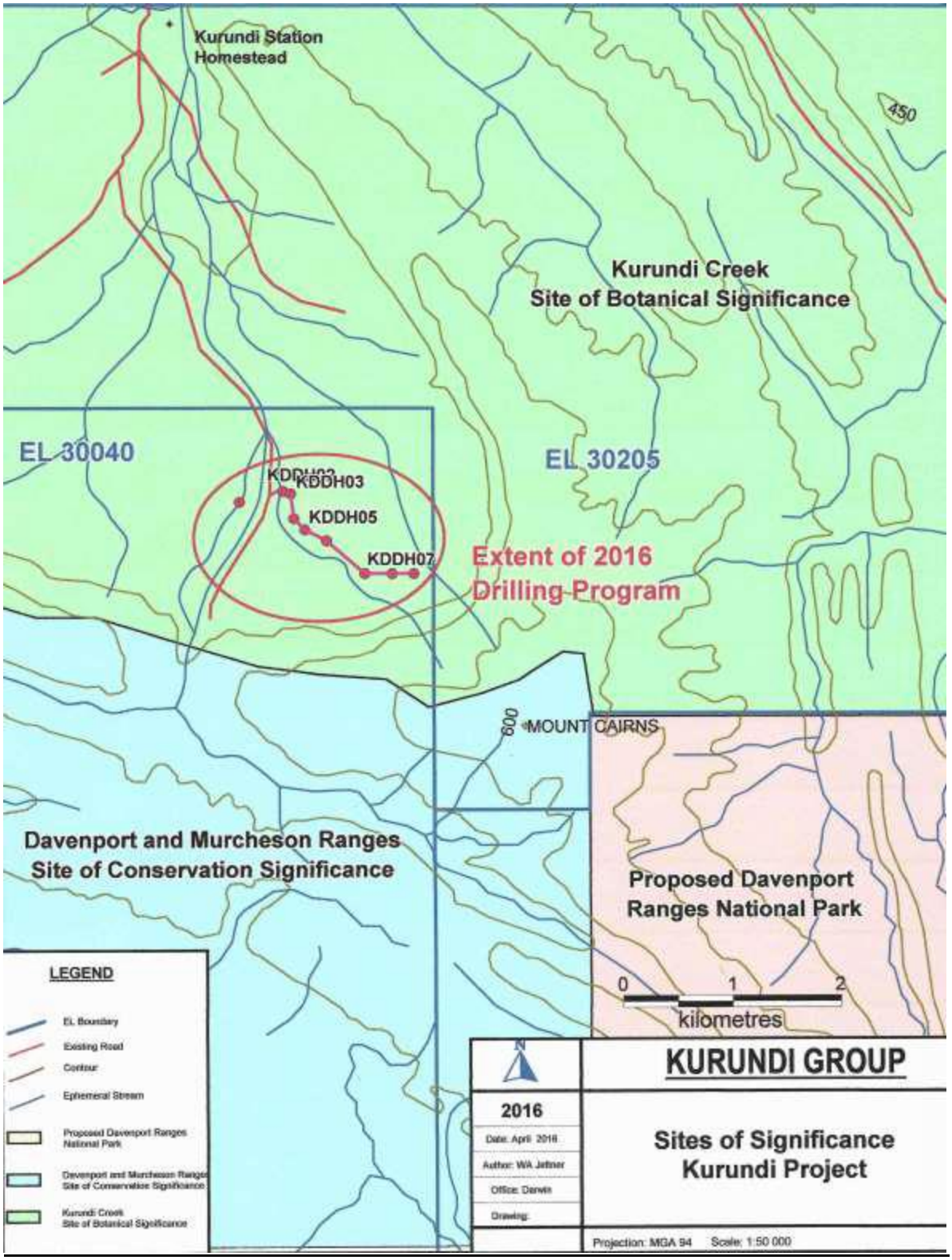
3.1 Project Location:

Northern Territory Location Map showing location of Kurundi Project (scale 1:5M)

Locality map:



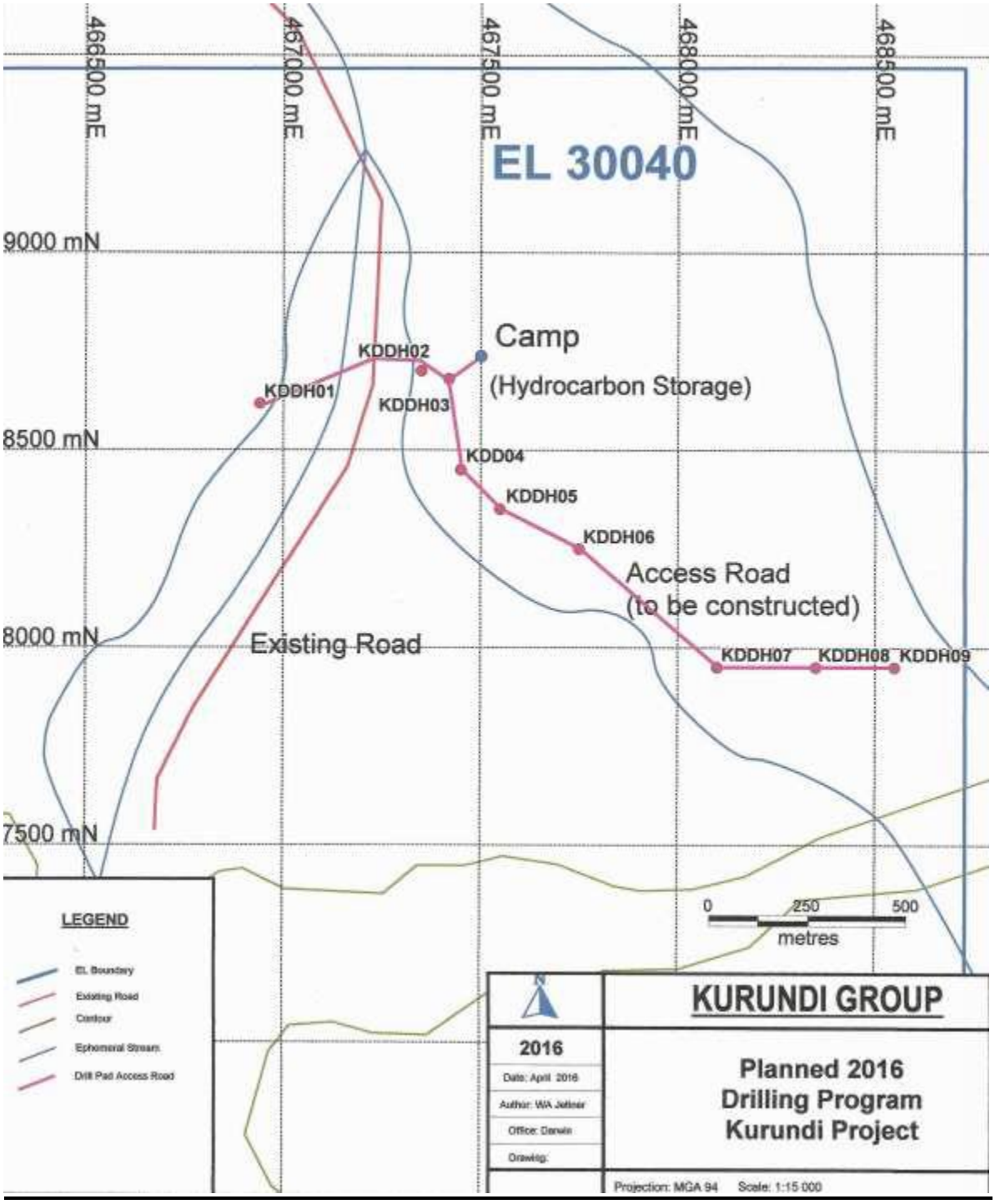
Regional Topographical Map showing Kurundi Project 2016 planned drilling activities in a regional context (Scale1:275K)



Regional Topographical Map showing Kurundi Project 2016 planned drilling activities in a regional context in relationship to conservation Sites of Significance (Scale1:50K)

Note: Within this map area the Davenport and Murcheson Ranges Site of Conservation Significance **underlies** the Kurundi Creek Site of Botanical Significance.

Site layout



Topographical Map showing Kurundi Project 2016 planned drilling activities (including drill pads, access road and camp) in a local context (Scale1:15K)

3.1 Previous Activities and Current Status

Historical Mining/Exploration

Historically there has been no exploration drilling within the area of ELs 30040 and 30205 as shown on the open file coredat and drillhole collars files from the DPIR.

There is one site listed in the MODAT mineral occurrences database, that is Kurundi (MODAT ID 585), which occurs within EL30040.

Kurundi Group Exploration

The Kurundi Group exploration within the exploration licences of the Kurundi Project to date has consisted of soil sampling and geophysical investigation consisting of a ground magnetic survey and a gravity survey which has resulted in the location of a sizable coincident magnetic and gravity anomaly in the area. They have had the anomalies modelled by consultant geophysicists and proposed to test this modelling with a number of exploration drill holes in 2016.

Exploration activity in the reporting period

The drilling program as outlined in this document has not commenced resulting in a nil report of activity or ensuing environmental or stakeholder impact. This is due to ongoing and hitherto unresolved grievances the Kurundi Group has with the onerous nature of determinations made by the Land Access and Arbitration Panel after the pastoral lease holders declined to reach agreement with the Kurundi Group and time delay post MMP approval in the obtaining of a Flora Fauna Survey and Report.

3.2 Proposed Activities

The purpose of this MMP is to seek approval for the drill testing of an area postulated to have the potential to host economically recoverable concentrations of base metals. In this first phase of drilling the aim is to investigate a coincident magnetic and gravity anomaly in the Kurundi Project area.

Preliminary ground works have been undertaken to investigate existing access tracks, locating and determining suitability of proposed drill sites and conducting field geophysical investigations within the exploration area in previous field seasons.

Once access has been negotiated and site conditions examined and documented in the Rehabilitation Register, site preparation may commence.

It is proposed to construct an access road connecting the drill sites with each other and the camp and an existing station access road to minimise the amount of road

requiring construction.

The camp site is a large open area identified and utilised in previous field seasons for the exploration camp and will not require and clearing.

It is planned to drill 9 Reverse Circulation drill holes. The maximum depth of the drill holes is 300m.

The drilling program is expected to be completed within 14 days of arrival on to the site.

At the completion of the drilling program, rehabilitation works will be undertaken as required and as described in Section 6 of this application.

Further maps and images of the proposed activities as well as a table of planned drill locations are included as APPENDIX 3.

Table showing Proposed Activities

Mining Interests (i.e. titles)	EL 30205	EL 30400
What time of the year will exploration occur?	April – August 2018	
How long is exploration expected to occur?	1 month	
Type of drilling (i.e. RAB, RC, Diamond, aircore)	RC	
Target commodity	Base Metals/Gold	
Number of proposed drill holes	9	
Is drilling likely to encounter radioactive material?	No	
Maximum depth of holes	300m	
Number of drill pads (Length: 20m x Width: 10m)	9	
Is drilling likely to encounter groundwater? (Y, N, unsure)	Yes	
Number of sumps (Length: 10m x Width: 4m x Depth: 3m) Note: Increase in sump size to hold potentially contaminated ground water.	9	
Length of line / track clearing (Kilometres: 2 km x Width: 3m)	0.60 Ha	
Number of costeans (Length: x Width: x Depth: m)	0	
Total bulk sample (tonnes) (Length: x Width: x Depth: m)	0	
Will topsoil be removed for rehabilitation purposes?	No	
Previous disturbance yet to be rehabilitated on title (ha)	0	
Camp Loc: 467500mE 7728700mN (Length: 30m x Width: 20m)	.06 Ha	
Total area disturbed (hectares)	0.84 Ha	

Other:	0	

4 Current Project Site Conditions

Site Conditions	Description
Geology	The 2018 project area is centered on the double plunging complex Kurundi Anticline. This structure lies within the Davenport Ranges near Wauhope in the Northern Territory The broader project area is dominated by sediments and volcanics of the Proterozoic Hatches Creek group which is a mainly conformable sequence of shallow marine to fluvial sedimentary and sub-aerial to subaqueous volcanic rocks. This Group is composed of the Ooradidgee, Wauchope and Hanlon Subgroups. The regional geology is further complicated by a series of synclines (Bonney Syncline) and anticlines (Kurundi and Skinner Anticlines) separated by regional shear zones. The sequence of rocks within the Ooradidgee Subgroup is of particular interest as it contains the Edmirringie volcanics which are considered highly prospective as they are known to host potentially economic gold, silver and base-metal mineralization in other locations within the region.
Hydrology	The project area has intermittent surface drainage via a number of creeks including the Bonney, Branch and Kurundi Creeks. Creek flow is typically ephemeral after heavy rainfall events, with water remaining in a number of water holes for some period after heavy rainfall and flooding. The groundwater potential of the area is generally bore quantities of less than 5.0L/s with salinities greater than 1500mg/L. The nearest registered bores are located 5.5km to the north of the exploration area (RNs 2439 and 12786 – bore logs included in appendices)
Flora	The Flora and Fauna Report was undertaken by Low Ecological Services and accepted by DPIR on 29 November 2016. No threatened flora species were identified by the consultants or NT Flora Atlas as occurring or potentially occurring within 20 km of the lease areas. Three data deficient and six near threatened species were identified by the NT Flora Atlas as occurring within 20 km of the lease areas. Three introduced flora species were identified as occurring or potentially occurring within 20 km of EL30040 and EL30205 by the consultant and NT Weeds public database. One other species was identified by just the NT Weeds public database. Two of these species are Weeds of National Significance.
Fauna	The Flora and Fauna Report was undertaken by Low Ecological Services and accepted by DPIR on 29 November 2016. The NT Fauna Atlas identified 906 records of 159 fauna species within 20 km of the lease areas. The consultant identified seven fauna species listed as threatened under the EPBC Act as occurring or potentially occurring within 20 km of lease areas. Three are listed as endangered; Pezoporus occidentalis, Rostratula australis and Zyzomys pedunculatus. Four are listed as vulnerable; Polytelis alexandrae, Macrotis lagotis, Petrogale lateralis and Liophlis kintorei. Records of Petrogale lateralis and Macrotis lagotis, species listed as

	vulnerable under the EPBC Act and near threatened under the TPWC Act, were identified by the NT Fauna Atlas within 20 km of EL30205. Macrotis lagotis is also listed as vulnerable under the TPWC Act. Petrogale lateralis is listed as near threatened under the TPWC Act. A further eight species listed as near threatened under the TPWC Act were also identified by the NT Fauna Atlas within 20 km of the lease areas. The consultant identified ten migratory species as occurring or potentially occurring within 20 km of EL30205. Nine introduced fauna species were identified by the EPBC PMST as occurring or potentially occurring within 20 km of EL30205. Four introduced fauna species were identified by the NT Fauna Atlas within 20 km of EL 30205. A search of the Infonet database identified four endangered species; 1) Australian Painted Snipe (sp: *Rostratula Australia*). 2) Southern Marsupial Mole (sp: *Notoryctes typhlops*) 3) Central Rock-rat (sp: *Zyzomys pedunculatus*), 4) Painted Snipe (sp:*Rostratula benghalensis (senso lato*). A search of the Infonet database identified two vulnerable species; 1) Greater Bilby (sp: *Macrotis lagotis*), 2) Black-Footed Rock Wallaby (sp: *Petrogale lateralis*), A search of the Infonet database identified the following invasive species; 1) Rock Pigeon (sp: *Columba livia*), 2) Camel (sp: *Camelus dromedaries*), 3) Domestic dog (sp: *Canis lupus familiaris*), 4) Donkey (sp: *Equus asinus*), 5) Horse (sp: *Equus caballus*), 6) Cat (sp: *Felis catus*), 7) House Mouse (sp: *Mus musculus*), 8) Red Fox All species listed in the Territory Parks and Wildlife Act and the Environmental Protection and Biodiversity Act and sighted within the work areas (including the camp area) will be recorded and reported to the Department of Land Resource Management.
Land Use	The open range grazing of cattle is conducted on the pastoral lease/s and this represents the only land use in the exploration area.
Historical, Aboriginal, Heritage Sites	A search undertaken with the DLPE Heritage Branch has shown no heritage or archaeological sites in the 2016 exploration area, similarly a search undertaken by the AAPA has shown no sacred sites within the 2016 exploration area.

5 Environmental Management System

The Kurundi Group currently does not have a formal environmental management system in place and this section will be used to report progress made against the outcomes listed in Section 5.0 of this MMP. We are currently developing an Environmental Management Plan and this is included as APPENDIX 7.

5.1 Environmental Policy and Responsibilities

The Kurundi Group aims to minimise the impact on the natural environment in which we operate by adopting best environmental practices. To achieve this we ensure strict compliance with local statutory laws and regulations, promote awareness of environmental issues amongst our workforce to identify the potential impact of their activities and wherever possible to conserve natural resources.

The Exploration Manager shall be responsible for day to day management and control of activities that may impact on the environment.

5.2 Statutory and Non-Statutory Requirements

All exploration activities will be conducted under the relevant acts and regulations which may include but are not restricted to the following:

- *Mining Management Act*
- *Mineral Titles Act*
- *Weeds Management Act*
- *Bushfires Act*
- *Heritage Conservation Act*
- *NT Aboriginal Sacred Sites Act*
- *Native Title Act*
- *Aboriginal Land Rights (Northern Territory) Act*
- *Environment Protection & Biodiversity Conservation Act*
- *Atomic Energy Act*
- *Work Health & Safety (National Uniform Legislation) Act*

Also

- License conditions

 Authorisation conditions

 Conditions agreed to with the landowner

The Kurundi Group is committed to working as harmoniously as possible with all stakeholders in the area. The main group likely to be affected by their activities in the area is the local pastoralist.

The pastoralists who may be affected by our activities are Peter and Brenda Saint (Kurundi Station) whose address is PO Box 508 Tennant Creek NT 0861.

In accordance with the Department's new Land Access Agreement policy, correspondence outlining our planned Authorised Activities, including a series of maps showing the proposed work area has been sent to the pastoralist, prior to the lodgement of this Mining Management Plan.

5.3 Induction and Training

Induction and training is to be conducted for all personnel including geologists and field support teams, drilling crews and relevant technical services personnel prior to commencement of work. The Kurundi Project Induction Manual is included as APPENDIX 12.

As a minimum the induction will cover the following:

Introduction to the site – geography, contacts, land owners and emergency procedures, location of and use of fire extinguishers and other safety equipment;

Expected behaviour and personal conduct rules;

Access, including the use of roads and tracks and gates;

Control measures required with regard to the management of Aboriginal and historic heritage sites.

Control measures required with regard to the management of flora and fauna, including the procedures required where tracks, drill sites and camps are to be created. Indiscriminate clearing of vegetation is to be avoided at all times;

Handling, storage and disposal of waste;

Weed control

Sediment and erosion controls;

Control measures required with regard to surface and ground water management. Control measures required to be implemented with regard to the management and control of dust, noise, soil contamination and water pollution;

Reporting of complaints and incidents;

Rehabilitation of drill hole sites, access tracks and campsites;

Personnel vehicles (including hire vehicles) are to be adequately equipped, maintained and suited to task. Daily checks are a part of the daily routine and will be demonstrated as part of the induction;

The Kurundi Group has a policy of zero alcohol and drug tolerance for drivers and equipment operators when on the job;

Drilling and related equipment – The Kurundi Group uses contractors for all drilling. All operators must be trained and be able to demonstrate safe working practices on the equipment. No person shall operate any related equipment without adequate training and supervision. No person shall approach drilling machinery without the permission of the driller;

Housekeeping, security, personal safety equipment, personal safety (including remote area awareness & procedures, first aid, fauna awareness, breakdown / lost procedures;

Duty of care and individual responsibilities;

Operation of the Weed Identification Sheet

Operation of the Threatened Species Identification Handbook

5.4 Identification of Environmental Aspects and Impacts

Aspect	Impact
Surface Water Drainage Interference	Disturbance of natural drainage systems Erosion Increased turbidity
Groundwater contamination from drilling activities	Movement of groundwater from one aquifer to another resulting in cross contamination of aquifers
Invasive species movement to and from site due to vehicular transport	Introduction of weeds from vehicles Movement of weeds on vehicles leaving site
Flora disturbance from exploration activities	Disturbance of/or damage to vulnerable or endangered flora
Fauna disturbance from exploration activities	Disturbance of/or damage to vulnerable or endangered fauna, also disturbance to cows

	(and bulls)
Hydrocarbons and hazardous materials contamination from equipment or vehicles	Hydrocarbon leaks or spills resulting in contamination of soils, surface or ground water
Waste	Contamination of drill sites, camp site and tracks and surrounding areas by litter
Noise and Air Quality	Scaring of stock Health degradation of exploration personnel
Cultural and Heritage Sites	Damage to significant archaeological, cultural and heritage sites

Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
Surface Water Drainage Interference	Disturbance of natural drainage systems and erosion	2	The proposed work area has only low- order surface drainage with no significant or steeply banked drainage systems to be encountered. No clearing of vegetation will occur within 20m of any significant drainage unless it is for the drill access track to cross the drainage line. Any access track crossing a drainage line will be constructed in accordance with the requirements of the ESCP. Drainages are seasonal so no interference with flows will occur. Many of the proposed drill sites are close to creeklines so appropriate buffers and erosion control measure, such as diversion banks and whoa boys, should be used to mitigate run-off risks. Clearing of vegetation through the undulating rocky plain will also require erosion control measure so that erosion caused by the slope of the land does not occur. Appropriate erosion control measures should also be implemented when widening the	1	Any works that occur to cross a drainage system will be kept to an absolute minimum and will be done in accordance with the erosion and sediment control plan and will be rehabilitated immediately at the finalisation of the drilling program. Appropriate buffers nd and erosion control measures will be put in place.	Initially areas of potential impact will be identified in the initial on ground layout of the track and drill sites. After construction in accordance with the ESCP which will identify and remediate any ongoing potential impacts. Rehabilitation monitoring and inspection will continue to identify any real or potential impacts after the program is concluded.

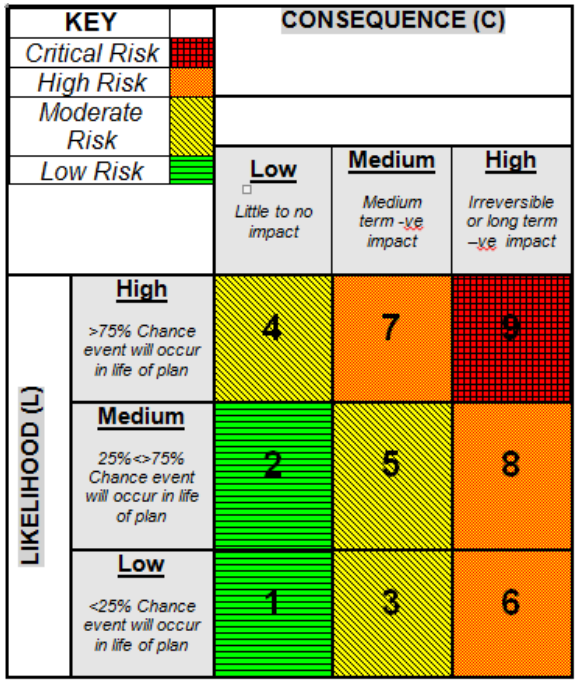
Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
			access track; for example, constructing trafficable whoaboys where access tracks go over rises in the landscape. Erosion control measures should be considered where access roads go through creeklines and roads should be constructed down to the base level of the creeks rather than filling them in.			
Groundwater Contamination	Cross contamination of aquifers	2	Little information is known of the subsurface hydrology of the Kurundi Pound area. The only water bores in the area are 2 shallow bores located at the Kurundi homestead which have very small flowrates. (<0.2 and 0.4 l/s). To prevent cross contamination of the surface water regime with groundwater each drill hole will have a sump constructed to contain any groundwater exiting the drillhole.	1	Grouting will be undertaken at the completion of each drill hole should the presence of significant aquifers be indicated during the construction of the drill hole.	Potential impacts will become apparent during drilling activities. Any potential impacts will be prevented by the control measures in place to do this.
Invasive Species	Introduction of weeds from vehicles	2	Due to the brevity of this exploration program (14 to 21 days) the Kurundi Group considers that the risk from introduced weeds is low for this	1	As a precautionary measure the Kurundi Group will ensure that all vehicles are cleaned offsite before they enter the exploration site and a vehicle	As part of the environmental inspections undertaken by the site

Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
			work program. Induction processes will inform all personnel of potential weed species and the monitoring and management will be undertaken by the site geologist. There is 1 national status WONS category weed in the general area: Parkinsonia, there are no NT Class A weeds listed for the Kurundi Pound area.		washdown site is located at the camp where vehicles entering and leaving the exploration site may be sanitised at this facility. At the completion of works the washdown facility shall be sanitised using a commercial herbicide to prevent the growth and spread of invasive species from the facility. As part of the flora and fauns survey conducted by the suitably qualified person all weed infestations within the survey area will be identified.	geologist weed monitoring and management are to be undertaken.
Flora	Disturbance Disturbance of vulnerable or endangered flora	2	No threatened flora species were identified by the consultants or NT Flora Atlas as occurring or potentially occurring within 20 km of the lease areas.	1	N/A	Monitoring, will be undertaken by the site geologist.
Fauna Disturbance	Disturbance of vulnerable or endangered fauna	2	The Kurundi Group believes that the risk of disturbance to significant fauna by the exploration program is low. Threatened species of the Kurundi area are: Greater Bilby and the Black-footed Rock Wallaby. Other species that may be	1	Implementation of the control measure will meet the recommendation of the 2016 Flora and Fauna Survey Cattle will be excluded from the drill sites and the camp site by the use of portable electric fences using tape-type conductors.	Further work (if required) including monitoring, will be undertaken on these areas by the site geologist.

Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
			disturbed are cattle. Speed limits will be implemented along access tracks to avoid impacts on species having a moderate-high likelihood or widespread occurrence within the lease area.			
Hydrocarbons and Hazardous Materials	Hydrocarbon Leak or spill – contamination of soil, surface or ground water.	2	Materials Spill Kits and absorbent matting will be stationed and available at all areas where there is a potential to spill hydrocarbons. Any bulk fuel will be stored at the camp in suitable self bunded tanks. Hazardous materials in the form of chemicals will generally be in quantities less than 1Lt. Drill chemicals will all be environmentally friendly and non- hazardous.	1	Any contaminated soil will be removed, bagged and disposed of at an appropriately licenced facility (Tennant Creek). All hydrocarbon leaks over 25Lt will be recorded as an environmental incident and will be reported to the DPIR.	Impacts will be identified in the first instance by personnel and also by workplace inspections undertaken by the site geologist
Waste	Contamination of drill sites, camp site and tracks with rubbish and waste	1	The Kurundi Group will induct all personnel and contractors on the expected actions when dealing with rubbish and waste.	1	All waste (including human waste) will be removed to a licenced waste disposal facility (Tennant Creek).	The location and removal of any waste or rubbish is the responsibility of all personnel and ultimately the responsibility of the site geologist
Noise and Air	Dust – dust	1	Workers will wear appropriate	1	Dust – visual monitoring will be	Impacts will be

Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
Quality	affects workers and nearby stock Noise – affects workers and nearby stock		PPE to protect against dust and noise Stock are required to be excluded from the work area using no entry signs and a portable 12V electric fence using a poly wire (white tape) conductor.		carried out by the site geologist, this will include the generation of dust and the wearing of correct PPE. Noise - audio monitoring will be carried out by the site geologist, this will include the generation of noise and the wearing of correct PPE.	identified and corrected using workplace inspections done by the site geologist
Cultural and Heritage Sites	Presence of Archaeological, Cultural or Heritage sites	2	The Kurundi Group have undertaken searches of Aboriginal, archaeological and heritage sites (results presented in this MMP). No such sites have been identified by these searches. The Kurundi Group is aware that there may be unlisted sites present in the area and will seek to protect cultural heritage through diligent review of formal surveys or disturbance works required to be done before a drill rig starts operation. All site staff will be provided with fact sheets endorsed by the AAPA and information to facilitate the early identification of potential heritage features or sites.	1	Any potential sites will be avoided at all costs and the site personnel informed of their location so as not to interfere with them. The position of any suspected sites will be made known to the Heritage Branch of the NTDLPE.	Potential unlisted sites may become known and/or identified by the required flora and fauna surveys, by the suitably qualified person or the site geologist who oversees the construction of the campsite, access road and drill pads.
Erosion and Sediment Control	Sediment and turbidity in creeks are a	2	Access roads and drill pads are planned to transit level areas to minimise sediment runoff. There	1	All access roads have been planned to be constructed on level areas. Tracks and drill pads will be	The site geologist will be responsible for the location, construction

Aspect	Impact	Initial Risk Rating	Control Measures (Prevention)	Residual Risk Rating	Management Measures (Remediation)	Impact Identification Procedures
	significant threat to the environment		will be no drilling in or adjacent to streams.		constructed in accordance with the DPIR guidelines (in APPENDIX 7)	and rehabilitation of all tracks and drill pads.
Fire	Fire outbreak causing wildfire	1	The Kurundi Group hereby commits not to use fire (except gas powered fire for cooking purposes).	1	LPG gas cookers will be used for cooking meals. Field Vehicles will carry fire extinguishers and shovels	Fire prevention and identification is the duty of all exploration personnel



Sample risk matrix and key.

5.5 Environmental Audits, Inspections and Monitoring

Environmental inspections will be undertaken by the Exploration Manager or Site Geologist during the program. At completion of the program all drill sites will be rehabilitated to meet best practice standards, see guidelines included under the section 'DPIR Rehabilitation Guidelines' in the Environmental Management Plan as APPENDIX 8.

Management Measures

General

The following controls will be implemented during the operational phase of exploration activities:

 All equipment used onsite will be maintained in good working order;

 Pre-start inspections of equipment will include inspections of noise and dust controls to ensure they are operational at all times;

 Speed limits on access tracks will be adhered to at all times in order to minimise dust and noise generation;

 Exploration activities will be generally restricted to day light; and

 No water will be discharged off site without the appropriate authorisations.

 Drilling, if required, may be conducted on a 24 hour, 2 shift basis, (usually diamond drilling only).

Noise

Impact

Noise affects workers, neighbours and nearby stock.

Management

Workers are protected by the use of correct PPE such as ear plugs or ear muffs.

Neighbours are located 4.6km away and are unlikely to experience intrusive noise from drilling operations.

If any stock are in the immediate area they will remove themselves to a location where they are comfortable, the immediate area contains no fences to inhibit free movement.

Stock will be excluded from the drill sites and the camp site by the use of portable 12V electric fences (tape-type conductors).

All drill rigs to be used on site will be fitted with the appropriate noise suppression equipment (eg. mufflers).

Where residents are likely to be affected by noise, a noise management plan will be agreed with the residents. This may include drilling times, noise suppression ("stealth" rigs eg, motors enclosed in sea containers) or relocation of drillhole sites. This is not expected to be a requirement for the Kurundi Project drilling program.

Monitoring

The Kurundi Group has identified no need for a noise monitoring program for the 2016 drilling program. The monitoring of the noise generated will be by workplace monitoring by the site geologist.

Dust

Impact

Dust affects workers, neighbours and nearby stock

Management

RC Drill rigs are designed as dust collectors as part of their sample collection system, the use of the correct PPE by the workers associated with drilling activities; drillers, offsiders, field assistants and geologists are an essential part of daily operation performance.

All drill rigs to be used on site will be fitted with the appropriate dust suppression equipment (eg. cyclones).

Monitoring

Visual dust monitoring is a part of the daily workplace observations of the site geologist and is an integral part of the periodic rig inspections.

Erosion and Sediment Control

Impact

Sediment and turbidity in nearby creeks can be influenced by inappropriately planned roads and drill pad locations. This is a sign of soil erosion and potentially inappropriate rehabilitation techniques in areas upstream.

Management

Turbidity in nearby streams is caused by sediment load being carried with the stream when it is flowing. This can be influenced by wind and water-bourne soils eroded from the in-situ soil profile due to vehicle disturbance and clearing. Primary considerations for

minimising this, is the correct siting of access tracks and drill sites to minimise soil disturbance. Clearing requirements should also be done “blade-up” to minimise damage to flora and subsequent soil damage.

Access roads and drill pad locations have been planned to keep on level surfaces to minimise sediment runoff and to allow easy access and drill rig operation. There will be no drill adjacent to streams.

The drilling program is designed to be conducted in the 2016 dry season to minimise any erosion that may occur before site rehabilitation can occur.

Monitoring

Because of the small program (9 holes) and short duration (14-21 days) it is not proposed to have a water monitoring program within the nearby ephemeral streams, which will most likely not be flowing or holding water anyway.

Surface Water Management

Impact

Disturbance of natural surface drainage systems and erosion.

Management

Any requirements for discharging of water will be identified during exploration planning and the appropriate actions taken as outlined in the risk matrix above. There is currently no anticipated need for water discharge from the exploration sites, Currently there are two registered bores in the general area (at the station homestead) and these both have minimal flow rates, (see the ground water section in APPENDIX 7). As exploration is being conducted in the dry season there is no need for any surface water management (surface runoff) plans to be developed.

Potable water will be sourced from Tennant Creek.

As the program is for RC (Reverse Circulation drilling method) drilling there will be no requirement for operational drilling water. As all drillers carry 3-5,000Lt of water (usually in the service truck or rod truck, there will be a significant quantity of non-potable water on hand for use in the planned activities should it be required. If additional water is required it may be sourced from Tennant Creek.

Foreseen volumes of potable (camp) water is approximately 1,000Lt per 4 days, equating for the total volume of potable water required being 4,000Lt over the planned 14 day drilling period. This water will be kept in a 1,000 Lt poly tank dedicated for potable water

only.

Monitoring

Surface water discharge will be workplace monitored by the site geologist as part of his daily duties.

Ground Water Management

Impact

Disturbance of natural surface drainage systems and erosion due to uncontrolled discharge. Cross contamination of aquifers if holes are left open if they encounter groundwater.

Ground Water Management

If the drill holes were to intersect locally fractured rock then this flow will be contained within the enlarged sumps. The two closest bores to the planned 2016 drilling are located at the Kurundi Homestead, these are RN 2439 (0.2 l/s – potable) and RN 12786 (0.4 l/s – non potable). These bores have low flow rates and their logs and water samples may be seen in APPENDIX 7 of the Kurundi Group Environmental Management Plan.

The Kurundi Group commits to grouting the drill holes at the completion of drilling that hole if the drill hole encounters the presence of significant aquifers, this will prevent cross contamination of aquifers.

Monitoring

Ground water presence and discharge will be monitored by the site geologist as part of his daily duties

Weeds/Invasive Species

Impact

Possible competition for native flora both within the planned drilling area and further afield (due to the presence of stock).

Management

Weeds identification and management will occur in accordance with this MMP and the attached EMP which is built around the NRM weeds data collection and eradication system. Weed eradication may involve spraying of small infestations around drill sites and the camp site. Large scale infestations are the responsibility of the pastoral leaseholder and not the Kurundi Group. He should have these larger infestations located and mapped as part of his weed management program.

An initial flora and fauna survey of the planned areas of operations will be undertaken by the suitably qualified person and will identify any weed infestations before activities commence.

Weed control and monitoring will be included as an ongoing regular duty of one or more designated staff members.

Wash down units will be used for vehicles and any other equipment moving on or off the exploration site to prevent the spread of declared and other environmental weeds.

The wash down unit will be located adjacent to the camp area (but separated from it be a margin of 50m) which will enable all vehicles leaving the site to be examined and treated if traversing a known weed infestation). Water for this unit will also be sourced from Tennant Creek and stored at the unit in a 200Lt blue plastic drum. Vehicle monitoring will consist of examination of grass and seeds before leaving site if the activities are being conducted within an identified weed infestation.

All materials sourced outside the project area must be weed-free prior to being taken onsite.

Monitoring

Monitoring of weed infestations occurs by visual means with periodic inspections in accordance with this MMP.

As part of the exploration activities any worker identifying a suspected weed infestation should report it to the site geologist for further evaluation.

Diesel, Oil, Chemicals and Hazardous Materials

Impact

Possible impact on flora, contamination of underlying soils, poisoning of stock if ingested.

Management

Fuels and Oils will be stored onsite in the appropriate storage facilities by the drilling contractors in accordance with the appropriate legislation, ie in self bunded storage facilities for bulk products and in delivery containers for packaged products. Spill kits will be positioned at fuel and oil storage facilities, generators and at the rig.

Drilling chemicals required by the drilling crew will be of the non-toxic and environmentally friendly type.

Hazardous chemicals will generally be of less than 1Lt quantity and will be stored in the appropriate DG storage cabinet.

Monitoring

Because of the short duration of the program the potential sources of pollution will be visually monitored by daily workplace observations by the site geologist as part of his daily duties

Waste

Impact

Untidy site with potential health hazards.

Management

All wastes will be collected and transported off site to the approved Tennant Creek Waste disposal facility.

Camps and drilling sites will be maintained in a clean and tidy condition at all times. All wastes, including human wastes, will be collected, segregated and stored in properly constructed containers and removed to an approved land fill or other disposal site in accordance with local council requirements.

Monitoring

Monitoring of waste collection and disposal will be the responsibility of the site geologist and will be undertaken visually.

Flora and Fauna Management

Impact

Clearing of access tracks and drill pads for flora and presence of workers and equipment for fauna.

Management

As a DPIR requirement all areas of disturbance will have to be surveyed by the suitably qualified person with regards to the presence of flora and fauna listed under the *Territory Parks and Wildlife Conservation Act* (TP&WC) and the *Environmental Protection and Biodiversity Conservation Act* (EPBC). This requirement will ensure that no listed flora and fauna are disturbed by this exploration program.

Flora and fauna loss or disturbance is primarily due to habitat loss, this is due to excessive or over clearing in drilling activities. The strategy for flora management is to minimise vegetation clearing by using the DPIR recommended ‘blade up’ track and drill pad construction techniques. As part of exploration activities any worker identifying a suspected endangered species should report it to the site geologist for further evaluation.

Monitoring

The monitoring of this is done directly within the reporting requirements of the annual MMP review process and as part of our Environmental Management Plan in the Rehabilitation Register.

Cultural and Heritage Management

Impact

Potential loss of cultural and heritage sites.

Management

At this stage the identification of cultural and heritage sites by applications to the AAPA and the DLPE Heritage Branch has shown that there are no recorded sites within the 2016 exploration area. The Kurundi Group recognises and acknowledges that not all cultural and heritage sites are reported to the government and they may exist unreported.

As part of the exploration activities workers are encouraged to report any suspected indigenous, archaeological or heritage sites to the site geologist for preliminary evaluation. If the site geologist is satisfied that the site may be a cultural or heritage site he will place a moratorium on the immediate area and report it to the appropriate authorities.

Monitoring

There have to date been no recorded cultural and heritage sites known in the exploration area. As part of the exploration activities personnel are encouraged to report any suspected indigenous, archaeological or heritage sites to the site geologist for preliminary evaluation. If the site geologist is satisfied he will place a moratorium on the immediate area and report it to the appropriate authorities.

Fire and Fire Management

Impact

Loss of habitat and small animals

Possible loss of infrastructure and equipment and possessions onsite.

Management

Fire management is one of the management tools undertaken by the pastoral leaseholder, the Kurundi Group have no intention of interfering with this, they only ask that the pastoralist informs them of his undertaking fire management in the area where they are working. The use of fire as a land management tool is the responsibility of the pastoralist and will not be undertaken in any circumstances by the Kurundi Group. The Kurundi Group

and its exploration personnel and contractors will not use camp fires or fires for cooking (except in a gas stove).

A commitment to the Land Access Assessment Panel determination “no fire is to be lit by the operator, or its contractor(s) during the duration of the proposed exploration program, unless agreed by Kurundi Station (the Saint family) previously, in writing.” Is made here.

Monitoring

Fire management monitoring is done visually by all personnel on the site.

5.6 Environmental Performance

5.6.1 Objectives and Targets

Performance targets relevant to this phase of exploration are the rehabilitation of tracks, drill pads and collars, the removal of waste from sites and, where appropriate, back-filling of drill sumps within 1 month after completion of the drill holes. It is planned that up to 2.0km of tracks to access the drill pads will be created during this program. The Site Geologist will be responsible to insure the tracks, camp site and drill sites are fully rehabilitated before the onset of the next wet season.

Control and reporting on the rehabilitation work will be managed by establishing a Rehabilitation Register (see Section 6.1 below), in which the nature of the disturbance and the state of rehabilitation efforts will be recorded. The Exploration Manager will verify the completeness of rehabilitation before signing off. A periodic review will ensure that steady progress on rehabilitation is maintained and no areas are overlooked.

To provide a measurable basis for the rehabilitation works a photographic record will be started and maintained throughout the exploration program. Photographs of tracks and areas that have previously been cleared will be taken. Prior to any ground disturbing work occurring photographs of the area to be affected will be taken. The photographs will be used as base line data against which the effectiveness of the rehabilitation work will be assessed. Additional photographic evidence will be collected at the following points to monitor the progress of the rehabilitation, these will also include photos at the time of drilling, after completion of rehabilitation and at monitoring intervals of pre-wet season, post-wet season and 12 months after completion

of rehabilitation.

The success of the exploration drilling program will be measured in terms of:

• Successfully testing the target area with the minimum number of holes required to decide if additional work is warranted.

• The completion of the program with no accidents or incidents involving employees, contractors or material damage to the environment.

• Completion of the program with the absolute minimum of surface disturbance.

• The removal of all items brought to the site including drilling equipment and rubbish.

• The rehabilitation of tracks and drill sites in accordance with DME guidelines.

• The restoration of the drill sites to as close to natural profile.

• Best practice environmental management.

It is anticipated that the drilling operations will be completed by the end of August and the rehabilitation completed within 1 month of completion of drilling activities and before the onset of the wet season. At the completion of the rehabilitation a final site inspection will be undertaken by the Exploration Manager who will ensure that the work has been done to the highest possible standards.

At closeout, a final rehabilitation report will be prepared detailing the work completed, and this will be submitted to the DPIR.

5.6.2 Performance Reporting

In accordance with the Instructions by a Mining Officer pursuant to approval conditions 1 and 2 of this MMP on 8 July, 2016, a Flora and Fauna Survey was undertaken and report made. The report by Low Ecological Services was accepted by DPIR on 29 November 2016 and the comments in the DPIR letter of approval of the report have been included in this revised plan. The report is attached as an Appendix.

No further activity requiring performance reporting has occurred in the period.

5.7 Emergency Procedures and Incident Reporting

5.7.1 Emergency Procedures

In the event of an emergency, either safety or environmental, the following general procedures are to be followed:

1. Ensure the safety of workers and anyone else present.

2. Prevent, control and stop the incident and its impact from spreading

3. Advise the Exploration Manager or Site Geologist and seek his assistance

4. Advise the Chief Executive of the NTDPIR by telephone of the incident and the steps undertaken to mitigate the impact and control the source of the incident if the incident rating is Class 2 or above.

5. Record the incident

6. Submit a written report on Form CF7-001 to the Chief executive as soon as practical after assessing the incident

7. Undertake all instructions as issued by the mining officers.

5.7.2 Incident Reporting

Environmental Incidents must be reported to the NT Department of Mines and Energy in accordance with Section 29 of the Mining Management Act.

The appropriate form to report an environmental incident is NTDPIR Form CF7-001, which is included in APPENDIX 5, NTDPIR Advisory Note AT8-006 is also included in APPENDIX 5 in the Environmental Management Plan.

The following guide to Incident assessment and reporting has been sourced from the NTDPIR advisory note AT8-006 “Environmental Incident Reporting”.

Incident Assessment

When assessing an incident and making decisions about reporting on an environmental incident or serious environmental incident an operator should have regard to the definition of “environment” in the MMA.

“Environment” is defined under Section 4 of the MMA as follows:

land, air, water, organisms and ecosystems on a mining site and includes:

(a) the well-being of humans;

(b) structures made or modified by humans;

(c) the amenity values of the site; and

(d) economic, cultural and social conditions.

Operators should conduct an appropriate assessment of the incident in order to determine the severity of the incident and whether the operator will be required to report the incident to the Chief Executive Officer of DPIR. For the purpose of classifying the severity of an incident and determining whether a report is required an operator may be **guided** by the assessment matrix in APPENDIX 5.

Operators should also have regard to the obligations set out in section 16 of the MMA, the conditions of authorisation, the permitted activities and the relevant procedures contained in the operator's own management plan, including its associated systems.

It is not always necessary for there to have been an environmental impact for the requirement to report an incident to be triggered. The *potential* for any incident to have an impact on the environment should also be taken into account when considering whether to make a report to the Chief Executive Officer. The definition of "environment" is broad and careful consideration should be given to each aspect of the environment before a determination is made.

Incidents likely to be the subject of a section 29 incident report may include, but are not limited to, the following:

(a) Escape (by any means such as a spill or leak) of a fuel, chemical, product or residue in solid, liquid or gaseous form including fumes, smoke, vapours, contaminated water, or dust;

(b) Emissions of noise (beyond reasonable permitted levels);

(c) Uncontrolled or accidental fire on any land, structure or infrastructure;

(d) Unauthorised, uncontrolled, or both, discharge of controlled waters to surface or ground waters;

(e) Damage to a Sacred Site, Aboriginal Protected Area, other protected area, archaeological or heritage site;

(f) Unauthorised mining, whether the activity is undertaken on or off an authorised mining site;

(g) Unauthorised clearing of vegetation or disturbance of the ground on or off an authorised mining site; and,

(h) Harm to human well-being.

In accordance with Section 29 of the MMA operators are required to report an environmental incident or serious environmental incident:

(1) As soon as practicable after the operator for a mining site becomes aware of the occurrence of an environmental incident or serious environmental incident on the site, the operator must notify the Chief Executive Officer of the occurrence.

Section 29 also states:

(2) An operator who gives notice orally must, as soon as practicable after doing so, give a

written notice to the Chief Executive Officer.

Operators should also be aware of Section 33 of the MMA, which states:

(1) A person commits an offence if:

(a) the person releases waste or a contaminant that is from a mining site; and

(b) the release is not authorised by the mining management plan for the site.

Potential Environmental Emergencies

Environmental incident or emergency Risk rating Assessment	Responsibility: Kurundi Group	Kurundi Group: Management actions/ procedures	Kurundi Group: Monitoring and reporting procedures
FIRE Risk rating; 1	To avoid causing outbreak of fire during completion of exploration activities	1) Use LPG gas cookers. 2) Field vehicles to carry fire extinguisher and shovel	1) Liaise pastoralists in event of fire. 2) Liaise with Bush Fire authorities in event of fire.
HYDROCARBON (FUEL) SPILLAGE Risk rating; 2	To avoid hydrocarbon spillage, To contain any hydrocarbon spillage	1) MSDS sheets available for all hydrocarbons used. 2)Bulk hydrocarbons stored within self-bunded tanks. 3)Hydrocarbon spill kit to be employed in case of hydrocarbon spillage, with appropriate PPE used.	Substantial spillage to be reported to the CEO, of the NT Department Mines and Energy in accordance to the procedures set out in the Guideline at the first practical opportunity.
CHEMICAL SPILLAGE Risk rating; 1	To avoid chemical spillage, To contain any chemical spillage	1) Chemicals stored within certified containers and stored in appropriate location. 2) MSDS sheets available for all chemicals used. 3) Chemical use to be conducted according to safe handling procedure, using appropriate PPE. 3) Chemical spillage to be contained, removed for disposal at approved site using appropriate PPE.	Substantial spillage not currently anticipated, owing to a maximum of <1L of any chemical to be used for current operations.
SIGNIFICANT HERITAGE SITES Risk rating; 2	To avoid damage or destruction of significant sites (documented AAPA heritage sites)	1) Review AAPA survey. 2)Plan field program to avoid AAPA and other delineated sites (1km buffer zone).	Substantial damage to be reported to AAPA, plus reported to the CEO, of the NT Department Mines and Energy in accordance to the procedures set out in the Guideline.
CONTAINMENT OF EXCESS GROUND WATER Risk rating; 2	To restrict discharge of potentially contaminated ground water, To contain all ground water	1) Establish drilling sump at each drill site, 2) Contain/direct all ground water flow to drill hole sump, 3) Contain any additional spillage or residues and contain within the drill sump,	Substantial damage to be reported to the CEO, of the NT Department Mines and Energy in accordance to the procedures set out in the Guideline at first opportunity.

6 Exploration Rehabilitation

Table 2: Description of Rehabilitation Methods

Disturbance	Rehabilitation Methods	Schedule (Timing)	Closure Objectives / Targets	Monitoring and Remediation
Drill holes	Peg removed. Collar cut and hole plugged with plastic cone 400mm below ground level, backfilled, and mounded with soil. Uncollared holes to be plugged at least 1 m below ground level. Drill spoils returned to drill hole and remaining inert material respread on drill site or placed in bottom of the sump. Sample bags and all rubbish removed.	Collar temporarily capped at the completion of each hole. Progressively or within 1 month of completion of program	All holes plugged/capped and stable/safe prior to end of program.	Inspection of holes to be undertaken at end of wet season/within six months to ensure no hole plug failures and in subsequent years to monitor site stability. Remediation of any failures to be undertaken at inspection. Before, immediately after, and subsequent year photos to be taken.
	Drill holes that intersect groundwater will be grouted	At completion of hole	No groundwater Cross contamination between aquifers	N/A
Drill pads	Drill pads to re-contoured to blend with surrounding topography and ripped across slope. Cleared vegetation to be spread over the site.	Progressively or within 1 month of completion of program	Drill sites to blend with surrounding environment.	Inspection of drill sites to be undertaken at end of wet season or within six months to monitor site stability, erosion, weeds and natural vegetation regrowth. Remediation of any unsuccessful objectives to be initiated at the inspection. Before, immediately after, and subsequent year photos to be taken.
Sumps	Refilled, compacted and levelled	Progressively or within 1 month of completion of program	Stable land surface	Follow up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.

Disturbance	Rehabilitation Methods	Schedule (Timing)	Closure Objectives / Targets	Monitoring and Remediation
Tracks / Gridlines	Levelled and scarified if required	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
Core trays	Core trays will be removed from site	Within 1 month of completion of program	Nothing remaining	NA
RC Drill Spoil	RC drill spoil will be placed back down the drill hole and any excess levelled	Progressively or within 1 month of completion of program	Stable land surface	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year.
Camp	All infrastructure removed from site	Within 1 month of completion of program	Nothing remaining behind after completion of exploration program	Follow-up observations/photographs at rehabilitation, pre wet season, post wet season, and 1 year

NOTE: Rows can be added/deleted where necessary.

6.1 Exploration Rehabilitation Register

Not applicable for this period

6.2 Costing of Closure Activities

Security Summary	
Domains	**Calculated Cost**
Site Infrastructure	**$00.00**
Exploration	**$13,816.00**
Post Closure Management	**$2,520.00**
Sub-Total All Domains	**$16,336.00**
CONTINGENCY @15%	**$2,450.40**
TOTAL COST	**$18,786.40**
10% Discount	**$1,879.00**
Amended amount	**$16,908.00**
1% Levy	**$169.00**
Total Amount Due	**$17,077.00**

CALCULATION SHEET

Management Area	Technique	Unit of Measure (UOM)	Cost per UOM ($)	Estimated Quantity	Sub Total ($)
Drill holes	Capping drill holes 30cm below ground	each	150.00	9	1,350.00
Drill pads	Rip/scarify	ha	900.00	0.18	162.00
Sumps	Refill and compact	each	Incl in above	9	0.00
Grout	Concrete	each	1250.00	9	11,250.00
Grid Lines/roads	Scarify grid lines and access tracks	km	500.00	2	1,000.00
Camp	Rip/Scarify	ha	900.00	0.06	55.00
Monitoring and Weed Management	Monitoring Visit	ha	250.00	0.84	210.00
Revegetation Maintenance, monitoring and assessment	Monitoring Visit	ha	2000.00	0.84	1,680.00
Mobilisation/ demobilisation	Triaxle Float	km	3.00	210	630.00

- See APPENDIX 10 - Security Calculation Spreadsheet V3

Appendices

- As per approved MMP of 16 June 2016
- **Plus**
- Kurundi Flora Fauna Survey Report September 2016